

Threats Analysis for the Florida Panther

SOUTH FLORIDA

Factor A: The present or threatened destruction, modification, or curtailment of the Florida panther’s habitat or range.

Source of stress	Stress																Factor A overall threat rank				
	Loss of ability for natural expansion of range				Habitat destruction				Habitat fragmentation				Population isolation & lack of connectivity					Habitat degradation			
	Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank			Severity	Scope	Stress rank	
	V	V	Very high		V	H	High		V	H	High		H	H	High			H	M	Medium	
	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank		Contribution	Irreversibility	Rank	Threat rank
Transportation projects	H	H	H	Very high	L	V	M	Medium	V	V	V	High	M	V	H	High	-	-	-	-	Very high
Lack of suitable habitat	V	H	V	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high
Water management & conversion to water (includes CERP)	-	-	-	-	M	H	M	Medium	M	V	H	High	M	V	H	High	L	M	L	Low	High
Residential development	-	-	-	-	V	V	V	High	H	V	H	High	-	-	-	-	-	-	-	-	High
Inadequate habitat patch size	-	-	-	-	-	-	-	-	-	-	-	-	M	V	H	High	-	-	-	-	High
Mining and mineral exploration	-	-	-	-	L	V	M	Medium	L	V	M	Medium	-	-	-	-	L	L	L	Low	Medium
Conversion of habitat to agriculture	-	-	-	-	L	H	M	Medium	L	L	L	Low	-	-	-	-	M	H	M	Low	Medium
Major ditches	-	-	-	-	-	-	-	-	L	V	M	Medium	-	-	-	-	-	-	-	-	Medium
Caloosahatchee river as a barrier	L	M	L	Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium
Intensification of agricultural uses	-	-	-	-	-	-	-	-	L	M	L	Low	-	-	-	-	L	H	M	Low	Low
Invasive exotic plant species	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	M	M	Low	Low
Lack of or poor habitat management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	M	M	M	Low	Low

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Factor B: Overutilization for commercial, recreational, scientific, or educational purposes.

Source of stress	Stress				Factor B overall threat rank
	Overutilization for Scientific purposes				
	Severity	Scope	Stress rank		
	L	L	Low		
	Contribution	Irreversibility	Rank	Threat rank	
Impacts of capture and monitoring	L	L	L	Low	Low

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Factor C: Disease and predation.

Source of stress	Stress				Factor C overall threat rank
	Disease				
	Severity	Scope	Stress rank		
	L	L	Low		
	Contribution	Irreversibility	Rank	Threat rank	
All diseases	L	M	L	Low	Low

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Factor D: The inadequacy of existing regulatory mechanisms.

The South Florida subteam believed regulatory mechanisms were more appropriately considered as strategies underlying the other stresses and sources. Therefore, they chose not to evaluate Factor D.

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Factor E: Other natural or manmade factors affecting the Florida panther’s continued existence.

Source of stress	Stress																Factor E overall threat rank				
	Panther mortality				Loss of genetic diversity				Decline of prey base				Genetic swamping					Loss/lack of support for panther conservation			
	Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank			Severity	Scope	Stress rank	
	H	H	High		M	H	Medium		M	M	Medium		L	V	Low			L	V	Low	
	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank		Contribution	Irreversibility	Rank	Threat rank
Intraspecific aggression	H	V	H	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High	
Mercury toxicity	L	V	M	Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium	
Road kills	H	M	M	Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium	
Illegal kill	L	H	M	Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium	
Disease	L	H	M	Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium	
Effect of small population size	-	-	-	-	V	M	H	Medium	-	-	-	-	-	-	-	-	-	-	-	Medium	
Lack of suitable habitat	-	-	-	-	V	V	V	Medium	-	-	-	-	-	-	-	-	-	-	-	Medium	
Lack of corridors for dispersal	-	-	-	-	M	H	M	Low	-	-	-	-	-	-	-	-	-	-	-	Low	
Escape of captive pumas	-	-	-	-	-	-	-	-	-	-	-	-	L	H	M	Low	-	-	-	Low	
Managed releases of pumas	-	-	-	-	-	-	-	-	-	-	-	-	M	M	M	Low	-	-	-	Low	
Ungulate disease	-	-	-	-	-	-	-	-	L	H	M	Low	-	-	-	-	-	-	-	Low	
Water management or conversion to water	-	-	-	-	-	-	-	-	M	M	M	Low	-	-	-	-	-	-	-	Low	
Natural climate or environmental change	-	-	-	-	-	-	-	-	L	V	M	Low	-	-	-	-	-	-	-	Low	
Lack of or poor prey management (e.g, over hunting)	-	-	-	-	-	-	-	-	L	L	L	Low	-	-	-	-	-	-	-	Low	
Prey habitat loss/degradation	-	-	-	-	-	-	-	-	M	H	M	Low	-	-	-	-	-	-	-	Low	
Exotic prey management	-	-	-	-	-	-	-	-	L	L	L	Low	-	-	-	-	-	-	-	Low	
Change in the legal description	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V	H	V	Low	
Public fear of panthers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	L	M	L	Low	
Landowner fear of regulation, lost property rights and negative economic consequences	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H	M	M	Low	

Threats Analysis for the Florida Panther

REINTRODUCTION

Factor A: The present or threatened destruction, modification, or curtailment of the Florida panther’s habitat or range.

Source of stress	Stress																		Factor A overall threat rank		
	Unidentified potential habitat				Habitat fragmentation				Habitat destruction				Incompatible management of private lands				Incompatible management of public lands				
	Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope		Stress rank	
	V	V	Very high		V	V	Very high		H	H	High		M	M	Medium		L	M		Low	
	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility		Rank	Threat rank
Urbanization	-	-	-	-	M	V	H	Very high	M	V	H	High	-	-	-	-	-	-	-	-	Very high
Transportation Projects	-	-	-	-	V	V	V	Very high	H	H	H	High	-	-	-	-	-	-	-	-	Very high
Low density residential development	-	-	-	-	V	H	V	Very high	V	H	V	High	-	-	-	-	-	-	-	-	Very high
Lack of land use planning	-	-	-	-	H	V	H	Very high	-	-	-	-	-	-	-	-	-	-	-	-	Very high
Inadequate evaluation of potential habitat in historical range	V	L	H	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high
Lack of prioritization system among areas	V	L	H	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high
Conversion of habitat to agriculture	-	-	-	-	M	M	M	High	M	M	M	Medium	-	-	-	-	-	-	-	-	High
Human recreational uses in panther habitat	-	-	-	-	M	M	M	High	M	M	M	Medium	-	-	-	-	M	M	M	Low	High
Invasive exotic plant species	-	-	-	-	L	H	M	High	L	H	M	Medium	-	-	-	-	-	-	-	-	High
Large public works projects (e.g, dams)	-	-	-	-	L	V	M	High	L	V	M	Medium	-	-	-	-	-	-	-	-	High
Lack of incentives to maintain/restore panther habitat	-	-	-	-	H	M	M	High	H	M	M	Medium	H	M	M	Low	-	-	-	-	High
Lack of complete data in historical range	M	M	M	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High
Right of ways	-	-	-	-	L	V	M	High	-	-	-	-	-	-	-	-	-	-	-	-	High
Conversion of habitat to silviculture	-	-	-	-	L	L	L	Medium	L	L	L	Low	-	-	-	-	-	-	-	-	Medium
Mining and mineral exploration	-	-	-	-	L	M	L	Medium	L	M	L	Low	-	-	-	-	-	-	-	-	Medium
Conflicting mandates	-	-	-	-	-	-	-	-	-	-	-	-	H	H	H	Medium	L	H	M	Low	Medium
Conflicting management for other species	-	-	-	-	-	-	-	-	-	-	-	-	L	L	L	Low	L	L	L	Low	Low
Lack of implementation of management plans	-	-	-	-	-	-	-	-	-	-	-	-	H	M	M	Low	L	M	L	Low	Low

REINTRODUCTION

Factor B: Overutilization for commercial, recreational, scientific, or educational purposes.

Source of stress	Stress				Factor B overall threat rank
	Overutilization for scientific purposes				
	Severity	Scope	Stress Rank		
	L	H	Low		
	Contribution	Irreversibility	Rank	Threat Rank	
Impacts of capture and monitoring	L	L	L	Low	Low
Impacts of removals for reintroduction to donor populations	L	L	L	Low	Low

REINTRODUCTION

Factor C: Disease and predation.

Source of stress	Stress												Factor C overall threat rank
	Disease				Parasites				Predation				
	Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank		
	L	H	Low		L	H	Low		L	L	Low		
	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	
Rabies	M	M	M	Low	-	-	-	-	-	-	-	-	Low
Pseudorabies	H	M	M	Low	-	-	-	-	-	-	-	-	Low
Hookworm	-	-	-	-	H	M	M	Low	-	-	-	-	Low
Manges	-	-	-	-	H	M	M	Low	-	-	-	-	Low
Unknown/other	L	L	L	Low	L	L	L	Low	-	-	-	-	Low
All sources of predation	-	-	-	-	-	-	-	-	V	M	H	Low	Low

REINTRODUCTION

Factor D. The inadequacy of existing regulatory mechanisms.

Source of stress	Stress												Factor D overall threat rank
	Inadequate land use planning or regulation				Lack of agency coordination				Inconsistent state regulation or protection				
	Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank		
	V	V	Very high		H	V	High		H	L	Low		
	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	
Inadequate development, implementation, and enforcement of comprehensive plans and zoning	V	H	V	Very high	-	-	-	-	-	-	-	-	Very high
Inadequate growth management planning and implementation	V	H	V	Very high	-	-	-	-	-	-	-	-	Very high
Little or no protection of upland habitats	H	H	H	Very high	-	-	-	-	-	-	-	-	Very high
Inadequate development and implementation of corridor/greenway planning	V	H	V	Very High	-	-	-	-	-	-	-	-	Very high
Lack of cumulative impacts evaluation	H	H	H	Very high	-	-	-	-	-	-	-	-	Very high
Inadequate land conservation or acquisition programs	H	H	H	Very high	-	-	-	-	-	-	-	-	Very high
Lack of public awareness of environmental issues and needs	H	H	H	Very high	-	-	-	-	-	-	-	-	Very high
Conflicting laws, regulations, mandates, or policies	M	M	M	High	-	-	-	-	H	M	M	Low	High
No mechanism for agency communication or coordination	-	-	-	-	H	L	M	Medium	H	L	M	Low	Medium
Lack of a mutually defined common goal		-	-	-	H	L	M	Medium	H	L	M	Low	Medium
Interagency distrust and lack of relationships and partnerships	-	-	-	-	M	M	M	Medium	-	-	-	-	Medium

REINTRODUCTION

Factor E. Other natural or manmade factors affecting the Florida panther’s continued existence.

Source of stress	Stress																				Factor E overall threat rank												
	Public/landowner resistance to reintroduction				Political and agency resistance to reintroduction				Human/panther interactions				Panther mortality				Genetic viability and population connectivity					Conflicting prey management				Conflicts with escaped nonpanther pumas				Competition with other species			
	Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank		Severity	Scope	Stress rank			Severity	Scope	Stress rank		Severity	Scope	Stress rank					
	V	V	Very high		V	V	Very high		H	V	High		H	V	High		M	H	Medium			M	H	Medium		L	M	Low		L	H	Low	
	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank		Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank	Contribution	Irreversibility	Rank	Threat rank
Public perception, misconception and lack of knowledge	V	M	H	Very high	-	-	-	-	V	M	H	High	-	-	-	-	-	-	-	-	H	M	M	Low	-	-	-	-	-	-	-	-	Very high
Conflicts with livestock (attacks on)	V	M	H	Very high	V	M	H	Very high	M	M	M	Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high	
Public fear of panthers (including fear of attacks and mortality)	V	H	V	Very high	V	H	V	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high	
Distrust of government agencies	H	H	H	Very high	H	H	H	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high	
Agency funding and resource constraints	-	-	-	-	V	M	H	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high	
Lack of incentives for states	-	-	-	-	H	H	H	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high	
Agency’s fear of liability (political, financial and professional)	-	-	-	-	V	M	H	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high	
Public official’s fear of losing constituent’s support	-	-	-	-	H	H	H	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high	
Influence of opposing special interest groups on public officials	-	-	-	-	V	V	V	Very high	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Very high	
Conflicts with hunters and hunting	H	M	M	High	H	M	M	High	H	M	M	Medium	-	-	-	-	-	-	-	-	H	M	M	Low	-	-	-	-	-	-	-	-	High
Landowner fear of regulation, lost property rights and negative economic consequences	H	M	M	High	H	M	M	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High	
Media sensationalism and panther myths	M	M	M	High	M	M	M	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High	
Relationships among potential supporting landowners and their neighbors	M	M	M	High	M	M	M	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High	
Lack of panther information dissemination to public officials and agencies	-	-	-	-	H	L	M	High	-	-	-	-	-	-	-	-	-	-	-	M	L	L	Low	-	-	-	-	-	-	-	-	-	High
Road kills	-	-	-	-	-	-	-	-	-	-	-	-	H	H	H	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	High	
Illegal kill	-	-	-	-	-	-	-	-	-	-	-	-	H	M	M	Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium	
Accidental death (including contaminants)	-	-	-	-	-	-	-	-	-	-	-	-	L	H	M	Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium	
Natural catastrophes	-	-	-	-	-	-	-	-	-	-	-	-	L	V	M	Medium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Medium	
Small number of founder panthers available	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V	M	H	Medium	-	-	-	-	-	-	-	-	-	-	-	Medium	
Unidentified or secured pathways for dispersal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H	H	H	Medium	-	-	-	-	-	-	-	-	-	-	-	Medium	
Deer Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V	M	H	Medium	-	-	-	-	-	-	-	-	Medium	
Intraspecific aggression or predation	-	-	-	-	-	-	-	-	-	-	-	-	L	M	L	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	L	M	L	Low
Removal of panthers for management purposes	-	-	-	-	-	-	-	-	-	-	-	-	L	M	L	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low	
Panther visibility to local public	-	-	-	-	-	-	-	-	M	L	L	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Low	
Inadequate regulation or understanding of distribution and occurrence of pet pumas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H	M	M	Low	-	-	-	-	Low	
Competition with other large predators	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	L	L	L	Low	Low	
Feral Hog Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	H	M	M	Low	-	-	-	-	-	-	-	-	Low	